Introduction

Fluor Daniel, Inc. was tasked by the U.S. Environmental Protection Agency (EPA) to conduct the Site Inspection Prioritization (SIP) for the Amarillo Refinery site (also known as Texaco Refining and Marketing), Amarillo, Randall County, Texas (EPA ID No. TXD007378995). After reviewing the file provided by EPA and the PA-Score for the site completed by Fluor Daniel, the EPA Site Assessment Manager and the Fluor Daniel Project Manager concluded that a technical memorandum would be sufficient to complete the SIP assignment.

Background Information

The Amarillo Refinery site (also known as Texaco Refining and Marketing) is located at 315 S. Grand Street, Amarillo, Randall County, Texas, 79104. Site coordinates are 35°12'40" North latitude and 101°47'25" West longitude. The site is a petroleum refining facility which was active as recently as September 1987, and is presently inactive, except for maintenance and corrective actions required under a RCRA Part B permit. The site is owned by Texaco, Inc., P.O. Box 509, Beacon, New York, 12508. The site was initially investigated under CERCLA because the site contains two inactive surface impoundments and one inactive landfill. Ground water samples from on-site monitoring wells and industrial production wells indicate detectable levels of organic contaminants.

Soil samples collected in 1984 and 1985 from various areas of the site indicated elevated metal concentrations. The results showed that the inactive portion of the facility had only low levels of contamination and contaminant migration was minimal in these areas. A RCRA Facility Assessment Evaluation was performed by EPA Region 6. This assessment identified 43 solid waste management units (SWMU) at the refinery. Thirty-one SWMUs were identified for further investigation as part of a RCRA Facility Investigation. Nine of the SWMUs had no indicated releases and three units had closure plans in place, submitted by Texaco to the state. According to the Texas Natural Resources Conservation Commission (TNRCC), as of June 1994, 14 of the SWMUs have been identified as immediate threats and are currently being addressed, the balance of the SWMUs are still in the investigation process.

Waste Source Characterization

The site contains two inactive surface impoundments and one inactive landfill which are considered the sources at the site. All of the sources are reportedly lined. The contaminants of concern are those related to the petroleum refining process. Contaminants of concern include: lead, chromium, zinc, arsenic, selenium, PCB 1260, as well as low levels of other organics. However, waste at the site may not be regulated by CERCLA because of regulations which exclude petroleum products. In addition, this facility has been regulated under RCRA.

Ground Water Migration Pathway

The 1985 sampling inspection performed by the Field Investigation Team (FIT) indicated varying levels of organic contamination in on-site production wells #16 and #12. The FIT report also indicated that the on-site wells were not properly cased and may provide a conduit for ground water contamination. The city of Amarillo has a blended drinking water system.

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Approximately 40% of the drinking water comes from ground water sources. The city has 106 wells. Sixty the 106 wells are located west of the city limits. These wells are completed at a depth of 700 to 850 feet. An additional 40 wells are located east of Amarillo. There are six wells located within the city limits. However, none of these wells are within a 4 mile radius of the site. The threat to the ground water pathway is minimal due to the lack of ground water wells close to the site.

Surface Water Migration Pathway

The City of Amarillo has a blended drinking water system. Approximately 60% of the water Amarillo uses is surface water drawn from Lake Meredith. Lake Meredith is located 35 miles north of the city. Site runoff travels to the north and enters a drainage ditch that is located near the railroad tracks. The drainage ditch out falls into a storm sewer collection system beneath the site. The city periodically pumps the storm sewer dry. Water removed from the storm sewer by the city is treated at the sewage treatment plant. The threat to the surface water pathway is minimal due to the lack of targets.

Soil Exposure Pathway

There are no residences, schools, or day care facilities within 200 feet of the site. The population within ¼ to ½ mile from the site is 277 people. The population within a 1/2 to 1 mile radius of the site is 3,386 people. No terrestrial sensitive environments were identified within the area of suspected contamination.

Air Migration Pathway

There are no indications of a release to the air pathway. No residents are located on site. The total population within 1 mile of the site is 3,663 people. The population within 1 to 2 miles of the site is 23,980 people. The population within 2 to 3 miles from the site is 21,699 people. The population within 3 to 4 miles of the site is 18,502 people. The total population within 4 miles of the site is 67,844 people.

Summary

The Amarillo Refinery site is located in Amarillo, Texas. The site contains two inactive surface impoundments and one inactive landfill. This site poses minimal concerns to the migration and exposure pathways evaluated. This site should not be consider for further evaluation under CERCLA based on the following criteria:

- The site is currently being investigated and remediated by the owner with oversight by the TNRCC under RCRA authority.
- Potential wastes at the site are exempt by petroleum exclusion under subtitle C., RCRA.

FIGURE 1

SITE LOCATION MAP

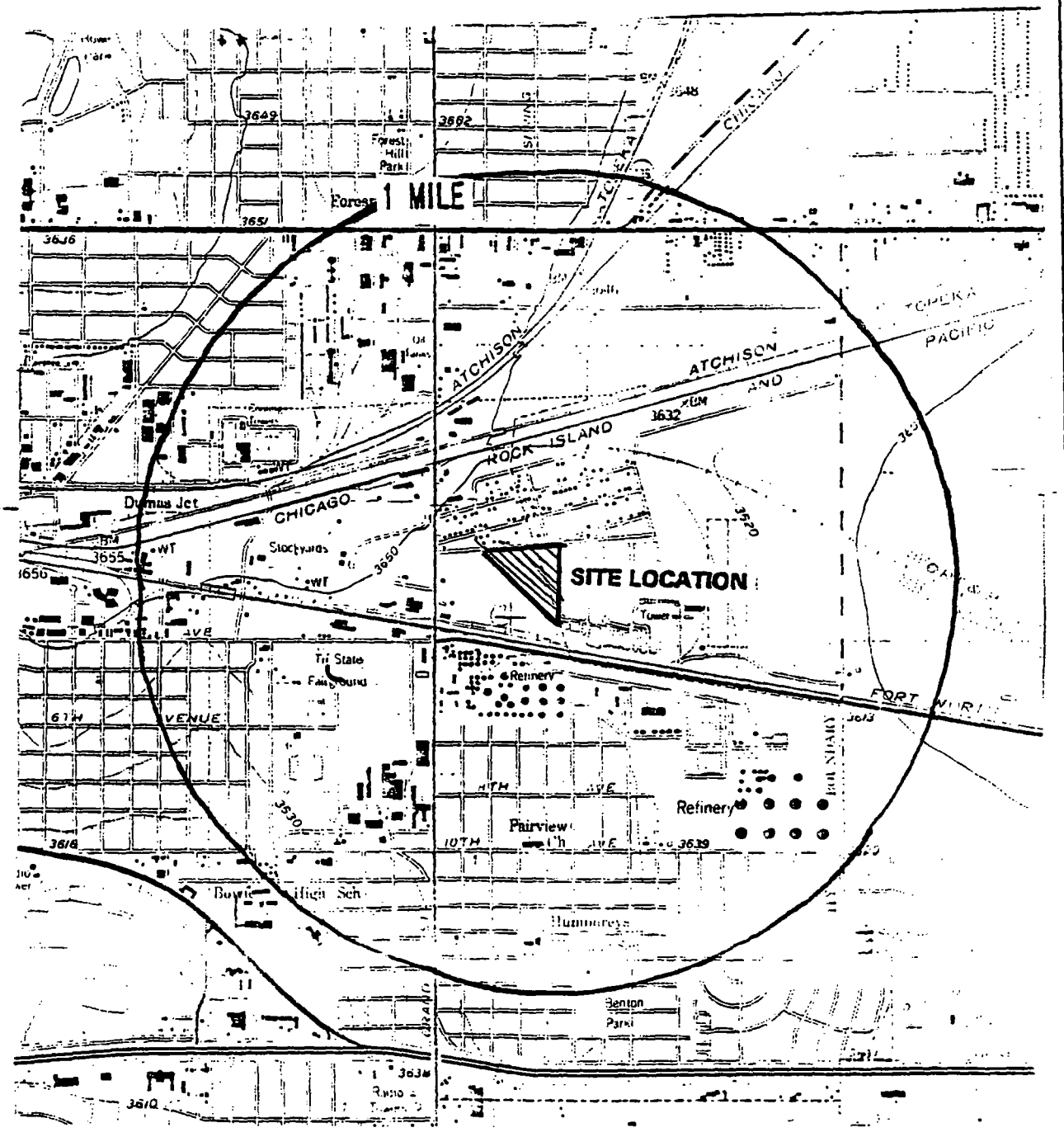

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FIGURE 1
SITE LOCATION MAP

Amarillo Refinery
TXD007378995

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